

I CLAIM:

1. For use on an outer surface of a glass faceplate of a self-emitting display device, wherein the glass faceplate includes a phosphor coating on an inner surface thereof, and wherein the phosphor coating is responsive to energetic electrons incident thereon for providing light for presentation of a video image on the glass faceplate, a
5 coating comprising:

an antireflective layer disposed on the outer surface of the faceplate;
an organic dye disposed in said antireflective layer for increasing color purity and contrast of the video image presented on the glass faceplate;
a first binding agent disposed in the antireflective layer for bonding to the dye and preventing diffusion of the dye out of the antireflective layer; and
a second binding agent disposed in and bonded to the antireflective layer for providing the antireflective layer with increased water resistance for preventing washing out of the dye from the antireflective layer.

2. The coating of claim 1 wherein said first binding agent is a silane binding agent.

3. The coating of claim 2 wherein said first binding agent is MS-50.

4. The coating of claim 3 wherein MS-55 is formed as an intermediate of said MS-50 and wherein said MS-55 bonds to said organic dye.

5. The coating of claim 4 wherein said organic dye is acidic and said antireflective layer includes TES, and wherein said MS-50 has a structure of:

f-organic structure -Si(OCH₃)₃

where f is a function group which reacts with said organic dye and -Si(OCH₃)₃ reacts with Si(OH)₄ in said TES.

6. The coating of claim 5 wherein the ratio of MS-50 to organic dye is 6:100.

7. The coating of claim 1 wherein said second binding agent is a hydrophobic saline binding agent.

8. The coating of claim 7 wherein said second binding agent is MS-80 for reducing moisture mediation in said antireflective layer in high humidity conditions.

9. The coating of claim 8 wherein said MS-80 has a structure of:

hydrophobic group – organic structure – Si (OCH₃)₃

where the hydrophobic group prevents moisture permeation into said antireflective layer.

10. The antireflective coating of claim 9 wherein the ratio of MS-80 to said organic dye is 1:10.

11. The coating of claim 1 wherein said antireflective layer is also antistatic in composition.

12. The coating of claim 1 further comprising an antistatic layer disposed intermediate and in contact with the glass faceplate and said antireflective layer.